## **Facilities Support and Operations District Energy Conservation Program**

915 Locust St. SE PO Box 25704 Albuquerque, New Mexico 87125 765-5950 Ext. 265 / 342 – Fax 247-3773

Ed. D. Brad Winter Chief Operations Officer Ron Rioux District Energy Conservation Coordinator (DECC)

January 10, 2011

**TO:** Middle School Science Teachers

**Subject:** Alternative Fuels Challenge

Please join us for the 5<sup>th</sup> Annual Alternative Fuels Challenge on April 16, 2011 in Albuquerque. The Alternative Fuels Challenge consists of hydrogen model car race and design competition, as well as the option to compete in an essay and oral presentation competition. Teams are provided everything needed to power a hydrogen model car. Teams provide design materials to construct the car – chassis, wheels, gears, etc. The 2011 essay topic is "What alternative fuels, in addition to hydrogen, should our country pursue in the future for transportation and why do you think these fuels would be a good choice for the United States?" The 2011 oral presentation topic is "Explain what two areas in the development of your model were most important, and why?"

We will provide a workshop for the teachers on hydrogen fuel cells and provide the hydrogen/power supplies for the competition. The teacher workshop will be February 12 at the APS Central Office at 6400 Uptown Blvd. NE from 9AM to 1PM. Breakfast snacks and light lunch will be provided. Attendance is not mandatory but you will need to make arrangements to pick up your model if you are not able to attend. Teachers who attend the workshop AND compete in the fuels challenge will also receive a stipend for that day – payable upon participation in the Alternative Fuels Challenge (if you attend the workshop but do not participate in the Challenge – you will not receive the stipend). Stipends are: \$75 within a 30 mile radius, \$125 within a 100 mile radius and \$150 if over a 100 mile radius. If we have a large number of teachers from the Los Alamos/northern NM area we may have a second workshop in that area. If you receive a hydrogen fuel cell kit, and do not participate in the Alternative Fuels Challenge – you are responsible for returning the kit to event organizers.

To participate in the Alternative Fuels Challenge – please complete the attached **registration form by February 4**. If you have any questions please feel free to contact me at 765-5950 x 342 or email at <a href="mailto:rioux@aps.edu">rioux@aps.edu</a>

Sincerely,

Ron Rioux DECC

## The Albuquerque Public Schools, Los Alamos National Laboratory, PNM, and Sandia National Laboratories Present the 5<sup>th</sup> Annual

## ALTERNATIVE FUELS CHALLENGE

## For Middle Schools April 16, 2011 Albuquerque, NM

Students Grades 6-8, maximum of 6 students/team

SCHOOL	
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TEAC	HER / COACH(s)
PHON	IE E-Mail
deadli registi	etition will be limited to the FIRST 40 teams that register before the <b>February 4, 2011</b> ne. Each school can have <b>THREE</b> teams, but each team must submit their own ration form. <b>NOTE:</b> A teacher/coach <b>MUST</b> be present at the competition for each teamed into the competition.
In add	lition to the car race and design challenge, our team will participate in the:  Essay Contest Oral Presentation
	SE return this registration form <b>BEFORE February 4, 2011</b> to Amy Tapia by FAX at 284-or email <a href="mailto:astapia@sandia.gov">astapia@sandia.gov</a> . (284-5207 for questions)
	Check this box if funding for team transportation is an issue for participation. Limited funds MAY be available for schools outside of a 100 mile radius of Albuquerque.
	Check this box if you will be attending the teacher workshop on Saturday, February 12 <sup>th</sup> .
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Teacher Workshop - Saturday, February 12<sup>th</sup> (9-1pm) at the APS City Center (6400 Uptown Blvd NE, 87110

Learn how to construct and operate a hydrogen fuel cell car and get tips from part participants! Attendance is not mandatory but you will need to make arrangements to pick up your model if you are not able to attend. Breakfast snacks and light lunch will be provided. Teachers who attend the workshop AND compete in the fuels challenge will also receive a stipend for that day – payable upon participation in the Alternative Fuels Challenge (if you attend the workshop but do not participate in the Challenge – you will not receive the stipend). Stipends are: \$75 within a 30 mile radius, \$125 within a 100 mile radius and \$150 if over a 100 mile radius. If you receive a hydrogen fuel cell kit, and do not participate in the Alternative Fuels Challenge – you are responsible for returning the kit to event organizers.

Additional Information will be provided after we receive this registration form